

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002721**Date Inspected:** 28-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wu Ming Kai, Lu Hua Jie**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Caltrans OBG, Tower**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Ken Jobes, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, to randomly monitor welding and Quality Control (QC) functions. While on site, the QA Inspector observed and/or discovered the following:

OBG – Bay 2

The Caltrans QA Inspector randomly observed the machining of bevels on longitudinal plate stiffeners, p235(t) – 8 pieces.

OBG - Bay 3

The Caltrans QA Inspector also randomly observed the fitting and tacking of plate stiffeners on Side Plate SP 426-001, Weld Nos. 001 through 010 using the shielded metal arc welding process (SMAW), electrode classification E7018-1 in the horizontal fillet (2F) welding position. Two welders were performing this work – Zhang Feng (I. D. 049769) and Wang Zhong hua (I. D. 053753). The QA Inspector verified the welders' qualifications by looking at their qualification card. The base material was A709, 345 F2, which is designated as a Seismic Performance Critical Member (SPCM). Welding Procedure WPS-B-P-2112-FCM was being used. Portable electrode ovens were being used and preheat was being administered. Certified Welding Inspector (CWI), Wu Ming Kai (CWI No. 04082031) was present during this welding.

New Tower Bay 1

WELDING INSPECTION REPORT

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The Caltrans QA Inspector randomly observed the machine Submerged Arc Welding (SAW) of fill passes on Weld Nos. SSD1-SA173 K/K-6, 13B, 4, 12B, 11B and 2. All eight welds are on the same joint and appear to be numbered as such because they alternate partial joint penetration (PJP) and complete joint penetration (CJP) along the joint. The "B" welds are CJP and the welds without a letter designation are PJP. The welding operator was Liu Zheng hong (I. D. No. 053673). The welding was in the flat groove (1G) position using Welding Procedure Specification (WPS) Nos. WPS-B-T-2221-B-U3c-S for the CJP; and WPS-B-T-2221-B-P3-S for the PJP. Certified Welding Inspector (CWI), Liu Hua Jie (CWI No. 07120741) was present during this welding as was ABF QA Inspector, Xie Yan.

All above observations appeared to meet the requirements of the job specifications.



Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Jobes, Kenneth
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Quality Assurance Inspector

Reviewed By:	Cochran, Jim
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QA Reviewer
